Indiana Utility Regulatory Commission
Energy Policy Act of 2005
Suggested Standards for State Consideration Data Request

I. Fuel Sources

Amendments to PURPA; Sec. 1251; amending 16 USC 2621(d) by adding (12) – Fuel Sources

Richmond Power and Light is a full requirements member of the Indiana Municipal Power Agency, and as such does not directly participate in the ownership of new generation sources. RP&L will defer all responses to this section to IMPA.

II. Fossil Fuel Generation Efficiency

Amendments to PURPA; Sec. 1251; amending 16 USC 2621(d) by adding (13) – Fossil Fuel Generation Efficiency

Background: RP&L owns and operates the Whitewater Valley Station, which consists of two coal-fired electrical generating units, with a combined capacity of 93 MW.

1) *What, if any, specific plans has your utility put in place to drive increased fossil fuel generating efficiency? How do these plans differ from what was done in the past? How do you expect these plans to change over the next ten years?*

RP&L prepares a 5-year maintenance and capital improvement plan associated with the generation assets to maintain availability, efficiency, and reliability. While these plans do not target specific efficiency goals, they may result in net efficient gains. RP&L has not changed its approach in this area in the past 10 years.

We would also caution on setting efficiency standards or improvement targets, as they can be difficult to measure. Boilers are dynamic processes with many variables that affect their efficiency, and as such, can experience fluctuations as these parameters change. Also, as utilities are required to continually make changes to boilers to meet new environmental requirements, these changes will also affect boiler efficiency. Therefore, it may be difficult to measure the impact of measures taken to improve efficiency, as they may be offset by efficiency losses resulting from the installation of pollution control equipment.

Looking forward, as the new energy markets evolve, RP&L may have to change its maintenance and capital improvement strategy to respond to the market. The market may, or may not, provide the financial incentive to conduct improvements as in the past.

2) *Does today's energy market environment provide sufficient incentive for utilities to increase the efficiency of its fossil fuel generation?*

RP&Ls exposure to the energy markets has been limited; however, we will offer a brief response to this question. Energy markets, as with most markets, can reward the most efficient participants, and therefore, one would tend to believe they reward energy efficiency as well. However, in this case, we are discussing marginal gains, and whether the cost in improve efficiency will be rewarded. The majority of the coal fleet in Indiana is in excess of 20 years old, and therefore, the utilities have had a significant time to improve efficiency. At this time, it is likely that, through the law of diminishing returns, that continued improvements will be minimal and at a higher cost. Market prices can be volatile and unpredictable, therefore, not lending themselves as a cost recovery mechanism for incremental improvements. They do however; reward more significant operating improvements, such as fuel costs, or other significant operating expenses.

3) *Provide the historical annual operating efficiencies for the past 10-years for each of your fossil fuel generating plants and a similar cumulative value for your utility.*

RP&L only operates the one station, the Whitewater Valley Station, and the 10-year historical Heat Rate values are shown below.

Richmond Power & Light
Whitewater Valley Station
Historical Heat Rates

Year	Unit #1	Unit #2
1995	11,203	10,325
1996	11,249	10,445
1997	11,377	10,339
1998	11,054	10,548
1999	10,950	10,482
2000	11,036	10,387
2001	11,018	10,518
2002	10,962	10,507
2003	10,817	10,477
2004	10,889	10,523
2005	10,907	10,614

III. Smart Metering

1) *Please describe the present status of time-based metering and communications within your customer base. Include detail by customer class (e.g. residential, commercial, industrial) relating to tariff offerings, smart meters deployed, means of communicating collected data with participating customers, and capital invested in infrastructure.*

The majority of the time-based metering deployed at RP&L is for load research purposes, and not being used under a time-based tariff. However, we do have 26 industrial customers being served under a Coincident Peak rate that utilizes time-based

metering. In total, we have 300 residential, 200 commercial, and 200 industrial time-based meters installed on the system for load research as mentioned earlier.

For those industrial customers that receive collected data, the data is communicated via fax, e-mail, and regular mail.

The estimated capital investment for this is $482,000.

2) *Describe the methods utilized presently or historically to communicate tariff/program opportunities to customers. Do you have plans to enhance marketing of these opportunities?*

RP&L primarily communicates these programs through two channels; the utility web site, and our key accounts program. Utility personnel regularly visit with industrial customers, and through these visits such information is presented.

RP&L currently has no plans to enhance the marketing of these programs.

3) *Detail any cost/benefit studies conducted for your service area regarding time-based metering communication deployment and tariffs. Detail should at a minimum include cost and demand response assumptions.*

RP&L did not conduct a cost/benefit analysis related to this program.

4) *Detail the response to any customer surveys you may have conducted in your service area regarding time-based metering and rates. If no surveys have been conducted, what customer input method does your utility employ to evaluate customer demand for time-based metering and rate offerings?*

RP&L did not conduct surveys regarding time-based metering. Being a municipal electric utility, RP&L is very close to its customers and listens to their input. With the exception of the industrial sector, there has been little, to no request for time-based metering. In meetings with the industrial sector we understood their desire to experiment with such rates and they have been implemented.

5) *What, if any, regulatory barriers exist which limit the expansion of time-based metering and rates?*

RP&L is not aware of any regulatory barriers that exist at this time.

6) *Can time-of-use rates be effectively implemented without the use of smart metering? Please describe any new or expansion of existing time-of-use rates your utility plans to implement in the next 24 months.*

While time-of-use rates have been implemented for many years, the development of smart metering has greatly improved its effectiveness. However, on a system-wide deployment, the costs are still substantial. Costs include not only the meter itself, but also the software used for analysis and storage, the metering reading devices, and any AMR considerations.

RP&L currently does not have any plans to either implement or expand our current offerings.